

## **AMENDMENTS TO THE SPECIFICATION**

Please amend the specification as follows:

Please amend the paragraph beginning on page 36, line 1 of the specification (corresponding to paragraph [073] of US20030013091 A1, the published application) as follows:

A specific example of this method where ten unique labels are made from two different labels is provided in Example 1. Briefly, ten unique templates of a 220 base pair single-stranded DNA are synthesized. The templates consist of a pre-determined ratio of the following 20 base pair repeats where  $y+x=11$ : 5' (ACTCTCTCTCTCTCTCTCTC (SEQ ID NO:1)) $y$ (GCTCTCTCTCTCTCTCTCTC (SEQ ID NO:2)) $x$  3' The second strand is synthesized using the primer GAGAGAGAGA (SEQ ID NO:3), Klenow polymerase, DNA ligase, dGTP, dATP, and dCTP and dUTP each labeled with a different fluorophore. The labeled nucleotides will be incorporated into the DNA in a unique ratio determined by the ratio of the two repeats. In this example, the end result is ten uniquely labeled nucleic acids where the set ratio of the two fluorophores is 1:10, 2:9, 3:8, 4:7, 5:6, 6:5, 7:4, 8:3, 9:2, and 10:1.

Please amend the paragraph beginning on page 53, line 18 of the specification (corresponding to paragraph [117] of US20030013091 A1, the published application) as follows:

5' (ACTCTCTCTCTCTCTCTCTC (SEQ ID NO:1)) $n$ (GCTCTCTCTCTCTCTCTCTC (SEQ ID NO:2)) $m$  3' where  $n=1,2,3,4,5,6,7,8,9,10$ ,  $m=1,2,3,4,5,6,7,8,9,10$ , and  $n+m=11$ .

Please amend the paragraph beginning on page 53, line 21 of the specification (corresponding to paragraph [118] of US20030013091 A1, the published application) as follows:

The second strand is synthesized using the primer GAGAGAGAGA (SEQ ID NO:3), Klenow polymerase, DNA ligase, dGTP, dATP, dUTP-fluorescein and dCTP-rhodamine. After the reaction is complete the product is treated with S1 nuclease to digest the DNA with gaps, and the remaining full length DNA is then purified. The labeled nucleotides will be incorporated into the DNA in a unique ratio determined by the ratio of the two repeats. The

end result is ten uniquely labeled nucleic acids where the set ratio of fluorescein to rhodamine is 1:10, 2:9, 3:8, 4:7, 5:6, 6:5, 7:4, 8:3, 9:2, and 10:1.

Please insert the Sequence Listing submitted herewith into the specification after the Abstract.